State Water Resources Control Board

Division of Water Rights
1001 I Street, 14th Floor • Sacramento, California 95814 • (916) 341-5363
Mailing Address: P.O. Box 2000 • Sacramento, California • 95812-2000
FAX (916) 341-5400 • Web Site Address: http://www.waterrights.ca.gov

Winston H. Hickox
Secretary for Environmental Protection

Gray Davis
Governor

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at http://www.swrcb.ca.gov.

NOV 21 2001

Mr. David P. Boergers
Office of the Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A
Washington, D.C. 20426

Dear Mr. Boergers:

COMMENTS BY THE STATE WATER RESOURCES CONTROL BOARD ON DRAFT NEPA SCOPING DOCUMENT 1 AND CEQA NOTICE OF PREPARATION FOR RELICENSING OF THE OROVILLE FACILITIES (FERC LICENSE NO. 2100)

The State Water Resources Control Board (SWRCB) has received the document titled Draft NEPA Scoping Document 1 and CEQA Notice of Preparation (SD1) for Oroville Facilities Relicensing. This document, prepared and circulated by the current licensee, Department of Water Resources (DWR), solicits comments from federal, state and local resource agencies, and all other interested parties, regarding environmental issues related to the Federal Energy Regulatory Commission (FERC) relicensing of the Oroville Facilities (FERC No. 2100) hydroelectric project. Issues identified will be used to develop a study regime that is expected to gather resource data adequate for the preparation of environmental documents to be used for compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SWRCB staff respectfully submits comments to assist DWR and the FERC in this environmental assessment process.

The SWRCB is the agency charged with implementing the Clean Water Act (33 USC §§1251-1387) (CWA) in the state of California. Water quality certification under Section 401 of the CWA (33 USC §1341) may be issued if the SWRCB determines that there is reasonable assurance that the activity is consistent with federal and state water quality standards. The design and operation of the Oroville project must meet water quality objectives as defined in the Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region. Conditions resulting from controllable factors must protect the Basin Plan's designated beneficial uses for all water bodies affected by the hydroelectric element of the project. Issuance of a 401 Certification is a discretionary act and is therefore subject to CEQA. A NEPA/CEQA environmental document that adequately addresses the needs of the SWRCB is necessary to support any Section 401 Certification issued.

General Comments

DWR has elected to use the Alternative Licensing Process (18 CFR § 4.34) (ALP) in the relicensing of FERC Project No. 2100. Broad participation in this collaborative effort has provided a productive forum for informal scoping of issues related to the project. Through the collaborative process, various federal, state, and local resource agency representatives and other interested parties have helped the Licensee to develop an initial set of resource issues and concerns, presented in the SD1 as Appendix B. This list provides a comprehensive look at issues and concerns associated with the project. SWRCB staff recommends that all issues in Appendix B be addressed if the ALP collaborative team is to effectively analyze the effects of current project operation on attributes of the Feather River system and locale.

SWRCB staff has been active in the Oroville ALP and does recognize that considerable progress has been made toward identifying and addressing resource issues as the collaborative team moves into the study plan development phase of this process. During the initial phase of issue exploration, SWRCB staff presented to the Environmental Workgroup a preliminary statement of resource concerns which included general concerns and examples of the types of issues that must be addressed prior to decision-making by the SWRCB on license conditioning and issuance of a water quality certification for the Oroville Project relicensing (Attachment). As an active participant in the Oroville ALP, SWRCB staff continues to provide assistance to the collaborative group on data needs for evaluating project compliance with the CWA and for the successful issuance of a CWA Section 401 water quality certification.

The SD1 is intended to initiate both the NEPA and the CEQA process, but language in this document is vague as to the approach that will be taken by DWR to meet Lead Agency requirements under CEQA. CEQA Guidelines encourage the preparation of joint federal and state environmental documents (Title 14, CCR §15222 and §15226) or the reuse of existing federal documents (Title 14, CCR §15221). However, as the state Lead Agency, DWR may elect to prepare an independent CEQA environmental document. The SD1 states that DWR intends to meet CEQA requirements through issuance of an Environmental Impact Report, but it is unclear if a joint document will be prepared, if parallel CEQA and NEPA paths will be followed, or if the Licensee plans to use a final NEPA document from FERC. The Scoping Document 2 (SD2) should clearly disclose how CEQA compliance will be met.

SWRCB staff has, on several occasions, voiced concern for the scheduling of formal NEPA/CEQA scoping so early in this ALP. Through the collaborative forum, the Licensee has enjoyed a substantial level of informal public and resource agency input, leading to the development of issue sheets that provide the framework for study plans. By postponing the formal scoping process until a date beyond the collection and analysis of data from a first field season, the collaborative team and other commenters to this SD1 could have benefited from information gathered on some of the existing issue questions. It is understood by workgroup and plenary group members that data collected from resource studies may demonstrate the need for additional investigation. Additional study needs could take the form of either a more focused or

expanded scope (temporal or geographic) of investigation on recognized issues, or as initial study data is analyzed, new issues could be identified. Although both informal and formal scoping of issues have been conducted early in this relicensing process, the collaborative team must remain aware that familiarity with the project and its effects on resources may generate additional resource concerns that need to be addressed later in this process.

The Applicant Prepared Environmental Assessment (APEA) and the CEQA document must provide data to support a conclusion that project features and operation are protective of the beneficial uses designated for project-affected waters. Beneficial uses designated specifically for Lake Oroville and the Feather River immediately downstream of the facility include: Municipal and domestic supply, irrigation, power generation, contact and non-contact recreation, cold freshwater habitat, warm freshwater habitat, aquatic migration, cold water spawning habitat, warm water spawning habitat, and wildlife habitat.

The SD1 remains silent on the Licensee's intent to identify and implement recreation-based interim projects prior to any negotiated settlement that the collaborative team may develop. It is understood that interim project(s) approved and constructed before settlement agreement is reached will be banked as credits toward the Licensee's total obligation for recreation-related Protection, Mitigation and Enhancement measures (PM&Es) identified in any license application or APEA filed with the FERC. Interim projects are subject to environmental review just the same as all other project-affected resources and PM&Es developed for this relicensing effort will be. A complete SD2 should fully disclose the Interim Measures philosophy, a list of recreation issues addressed, and the process that will be followed to select, implement, and incorporate them into the NEPA and CEQA environmental filing package(s).

Specific Comments

Preliminary resource issues and concerns were presented by SWRCB staff at the January 23, 2001 Environmental Workgroup meeting (see Attachment). Collection of data adequate to answer these issue questions is critical to the SWRCB's evaluation of project effects on the designated beneficial uses of Lake Oroville and Feather River waters. Resource studies should be designed and conducted to provide the collaborative team the information necessary to present discussion of these issues in the APEA and to develop PM&Es or project alternatives as appropriate.

In addition, SWRCB staff recommends that the following concerns be addressed in both the NEPA and CEQA documents:

Water Quality

The Feather River, from the fish barrier dam downstream to the Sacramento River, has designated beneficial uses that include cold freshwater habitat, migration and spawning. Delivery of water at temperatures adequate to protect all life stages of the cold water species holding, spawning and rearing in this river reach is critical. Water temperature studies should be

designed to include a minimum of three years of thermographic data collection in an attempt to provide representation of various water year types. To adequately assess the controllable factors associated with achieving cold water temperatures downstream of the project, analysis should include not only the predictive modeling of various operating scenarios of the temperature control intake structure but also the potential management of cold water releases from the dam's existing low-level outlet.

Recreational Opportunities

Waters within the project boundaries have Basin Plan use designations that include both contact and non-contact recreation. Swimming, flat water boating, angling, camping and various other recreational uses are provided on Lake Oroville, Thermalito Forebay, Thermalito Afterbay and other surface waters of the project. Although project features provide tremendous opportunity for the fore-mentioned recreational uses, opportunities for whitewater recreation in the project area should also be considered. A feasibility study should be conducted to determine potential whitewater uses that could be achieved by utilizing natural or controlled flows upstream and downstream of the project features.

The collaborative team has identified various recreation-related projects which could be implemented as Interim Projects, prior to developing final PM&Es and reaching settlement among the participants. Any Interim Project selected and implemented will be recognized as a recreational PM&E under the settlement agreement. Information is needed to determine whether any of the proposed interim projects are actually outstanding responsibilities under the existing license. As stated in the SWRCB's list of preliminary concerns, the Licensee should provide a complete inventory of recreational mitigation obligations required by Articles of the existing FERC License, and should clearly disclose the current status of compliance with those measures. This inventory is paramount in differentiating between existing commitments and those desired conditions which will be considered during future negotiated PM&Es.

Aquatic Biota

The Oroville Wildlife Area supports numerous aquatic plant and animal species. This multiple use area also provides opportunities for various forms of recreation including camping, wildlife viewing, hunting, and shooting. Potential impacts on aquatic biota, associated with each of these recreational demands should be thoroughly evaluated. Inventories of sensitive plant, amphibian, and avian species should be conducted and risk factors to individuals and populations determined for future management decisions.

Alternative

The Thermalito Complex within the Oroville Facilities boundary was designed in part, as a warming basin for agricultural waters to be delivered to farmland east of the Afterbay. In addition, discharges to the Feather River are metered through the Afterbay Outlet to augment flow in the natural channel downstream of the project. The cold freshwater habitat downstream

of this point has the potential to be compromised by mixing of warm water from the Afterbay with the cold discharges to the channel from Oroville Dam.

SWRCB staff recommends that an alternative to the proposed action be explored. This alternative should consider the benefits and trade-offs that would occur with re-operation of the water delivery system through the Thermalito Afterbay. This alternative should include a feasibility analysis on various engineering options for providing separate sources of water for delivery to agricultural diversions and for downstream salmonid water temperature needs.

SWRCB staff appreciates the opportunity to comment on this SD1. Staff looks forward to working with FERC and DWR to help protect the beneficial uses of waters in the Feather River and Lake Oroville in the relicensing process for the Oroville Facilities. If you have questions regarding these comments or SWRCB participation in the Oroville ALP, please contact me at (916) 341-5397 or e-mail: sstohrer@waterrights.swrcb.ca.gov, or you may contact Jim Canaday, FERC Team Leader at (916) 341-5308.

Sincerely,

Sharon J. Stohrer

Sharon J. Stohrer
Environmental Scientist

cc: Mr. Len Marino
Department of Water Resources
State Water Project Analysis Office
P.O. Box 942836
Sacramento, CA 94236-0001

Mr. James Fargo
Federal Energy Regulatory Commission
e-mail: james.fargo@ferc.fed.us

Mr. Henry Ramirez
Department of Water Resources
1416 Ninth Street
P.O. Box 942836
Sacramento, CA 94236-0001

(Continued next page.)

cc: (Continuation page.)

Ms. Stacy Matthews
Regional Water Quality Control Board
415 Knollcrest Drive
Redding, CA 96002

Mr. Mike Meinz
Department of Fish and Game
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670

Mr. Michael Morse
U.S. Fish and Wildlife Service
2800 Cottage Way, Room W-2605
Sacramento, CA 95825

Mr. Steve Edmondson
National Marine Fisheries Services
777 Sonoma Avenue, Room 325
Santa Rosa, CA 95404

Mr. Harry Williamson
National Park Service
CA Hydro Program
801 I Street, Room 156-B
Sacramento, CA 95814

Mr. Chuck Bonham
Trout Unlimited
828 San Pablo Avenue, Suite 208
Albany, CA 94706

Mr. Richard Roos-Collins
Natural Heritage Institute
2140 Shattuck Avenue, #500
Berkeley, CA 94704

Attachment

State Water Resources Control Board
Participation in the
OROVILLE FACILITY RELICENSING
(FERC License No. 2100)

Agency Authority

In California, the State Water Resources Control Board (SWRCB), along with the Regional Water Quality Control Boards, has responsibility for the implementation and enforcement of the Federal Clean Water Act (CWA) (33 U.S.C. §§1251-1387). Section 303 of the CWA (33 USC §1313) requires the State to develop and adopt water quality standards for water bodies in all regions of the state. Pursuant to this CWA requirement and to the State's Porter-Cologne Water Quality Control Act (Water Code §§13000-14958), the Central Valley Regional Water Quality Control Board (RWQCB) has developed, and the SWRCB and the U.S. Environmental Protection Agency have approved, the Water Quality Control Plan for the Central Valley Region (Basin Plan). The Basin Plan designates beneficial uses of surface waters within the Sacramento River and the San Joaquin River Basins and prescribes water quality objectives designed to protect those uses. Beneficial uses designated specifically for Lake Oroville and the Feather River immediately downstream of the facility include municipal and domestic supply, irrigation, power generation, contact and non-contact recreation, freshwater habitat (cold and warm), aquatic migration and spawning habitats (cold and warm), and wildlife habitat.

Section 401 of the CWA (33 USC §1341) requires that every applicant for a federal license or permit to conduct activities which may result in a discharge to navigable waters must obtain certification that these activities will be in compliance with applicable water quality standards. Section 16.8(f)(7)(i) of FERC Regulations (18 CFR) explicitly references the requirement for 401 Certification on hydroelectric license applications. In California the SWRCB is the state agency authorized to grant, waive, or deny water quality certification. Under Section 401 authority, the SWRCB may issue a water quality certification for the federal relicensing of the Oroville Facility (FERC #2100) if it is determined that there is reasonable assurance that the activity is consistent with Basin Plan standards and the CWA. Facility design and operation must be found to be protective of the designated beneficial uses to the extent achievable in light of controllable factors and economic considerations. Should changes be required in maintenance or operation of the facility to meet water quality objectives protective of the beneficial uses, any 401 Certification issued will be conditioned as necessary for compliance with those water quality standards.

Resource Issues and Concerns

In working with the licensee and stakeholders on the FERC relicensing of the Oroville Facility, SWRCB staff will look at project effects on all designated beneficial uses of the waterway. Water quality objectives, including levels for bacteria, chemical constituents, dissolved oxygen, pH, oil and grease, pesticides, sediment, temperature, toxicity, and turbidity will be evaluated for compliance with the Basin Plan standards.

General concerns include all parameters of water quality as flow enters the project boundaries, passes through facility features, and discharges downstream. Direct and indirect effects of the project on aquatic ecosystem health, on recreational opportunity, and on domestic and

agricultural supply will be considered. Specific issues that will need to be addressed for the issuance of 401 Certification and for disclosure in the Applicant Prepared Environmental Assessment include, but are not limited to the following:

The primary purpose of the Oroville project is to provide a supply of water for various municipalities and for irrigation, power generation is recognized as incidental use of project waters. The licensee must demonstrate that primary water uses can be satisfied in season and in magnitude prior to scheduling delivery of stored water for power generation.

Lake Oroville releases made for power generation may cause dramatic fluctuations in lake level. What are the potential impacts of fluctuation zone and surface elevation change on recreation opportunities and on fish and wildlife habitat?

Proximity of project features and recreational facilities to shoreline and banks of water bodies offers potential for introduction of nutrients and bacterial contaminants to these waters. What are the water quality trends (including, but not limited to nitrogen, phosphorous and coliform bacteria levels) associated with project-related activities?

Lake Oroville, fed by tributaries that have a history of gold mining activity, has potential for accumulation of elemental mercury in its basin sediments. Potential presence and uptake of methylmercury through the food chain must be assessed.

Both coldwater and warmwater habitat, spawning, and migration uses have been designated for surface waters potentially affected by the project. A determination must be made as to specific thermal habitat that may be reasonably provided in each water body within project boundaries and downstream of the project.

Depth and capacity of the Oroville reservoir creates a thermally stratified condition. What is the cold water pool retained in the basin and what is its availability for release in various water year types?

Thermalito Afterbay acts as a thermal retention basin for project water prior to delivery to water districts outside the project boundary. How do releases from this water body affect the stream temperature and dissolved oxygen content of Feather River receiving waters?

The Feather River's low-flow reach has historically provided spawning habitat for a cold water fishery. How have reduced flows to this streamreach affected water temperature and gravel substrate necessary for successful salmonid reproduction?

Project features and operations alter the hydrology of the system, creating the possibility for scour zones within both natural and designed channels. What affects do discharge and ramping rates have on substrate scour and the mobilization of sediments into the water column downstream? How have turbidity levels been affected by project operation?

Alterations in stream hydrology affect the natural fluvial geomorphologic processes of a riverine system. How has the change in magnitude, frequency and timing of peak flows on the Feather River affected riparian vegetation recruitment in the low-flow reach and immediately downstream of the Afterbay?

Various recreational and public use facilities were designated as mitigation measures to minimize impacts resulting from the original Oroville Project construction. The Licensee should provide a complete inventory of recreational mitigation obligations required by Articles of the existing FERC License, and should clearly disclose the current status of compliance with those measures.

Sharon Stohrer
Environmental Specialist
Division of Water Rights
State Water Resources Control Board

sstohrer@waterrights.swrcb.ca.gov

January 23, 2001
Preliminary Issues